AMENDMENT TO THE CLAIMS

Claims 1-12. (Cancelled)

Claim 13. (Previously Presented) A growth factor composition comprising:

at least two growth factors selected from the group consisting of BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, TGF-β1, TGF-β2, TGF-β3, and FGF-1;

a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20kD; and

a solvent selected from the group consisting of water and aqueous buffer solutions, said composition being capable of promoting angiogenesis when administered to a living subject at a site in need of such angiogenesis.

Claim 14. (Previously Presented) A growth factor composition comprising:

a polypeptide of the TGF-β superfamily,

a growth factor selected from the group consisting of IGF-1, EGF, HGF, TGF-α, and PDGF,

a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20kD, and

a solvent selected from the group consisting of water and aqueous buffer solutions, said composition being capable of promoting angiogenesis when administered to a living subject at a site in need of such angiogenesis.

Claim 15. (Previously Presented) A growth factor composition comprising:

BMP-2, BMP-3, BMP-7, TGF-β1, TGF-β2, and FGF;

a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20kD; and

a solvent selected from the group consisting of water and aqueous buffer solutions, said composition being capable of promoting angiogenesis when administered to a living subject at a site in need of such angiogenesis.

Claims 16-18. (Canceled)

Claim 19. (Currently amended) ~~The method of claim 16,~~ A method for inducing angiogenesis in a patient comprising: providing a growth factor composition comprising a polypeptide of the TGF-β superfamily other than bFGF, and a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20 kD and a solvent selected from the group consisting of water and aqueous buffer solutions; and administering the growth factor composition to a patient in need of angiogenesis, such that angiogenesis is induced, wherein said step of administering comprises injecting the composition into the patient's heart.

Claim 20. (Previously Presented) A method for inducing angiogenesis in a patient in need thereof comprising:

providing a growth factor composition comprising a polypeptide of the TGF-β superfamily, a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20 kD, and a solvent selected from the group consisting of water and aqueous buffer solutions; and

administering the growth factor composition to said patient subcutaneously.

Claim 21. (Previously Presented) A method for inducing angiogenesis in a patient in need thereof comprising:

providing a growth factor composition comprising a polypeptide of the TGF-β superfamily, a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20 kD, and a solvent selected from the group consisting of water and aqueous buffer solutions; and

administering the growth factor composition to said patient intramuscularly.

Claim 22. (Previously Presented) A method for inducing angiogenesis in a patient in need thereof comprising:

providing a growth factor composition comprising a polypeptide of the TGF-β superfamily, a carrier comprising a vinyl pyrrolidone polymer having a molecular

weight of from about 2.5 kD to about 20 kD, and a solvent selected from the group consisting of water and aqueous buffer solutions; and

administering the growth factor composition to said patient intravenously.

Claim 23. (Original) A method for treating ischemic tissues, comprising: providing a growth factor composition comprising a polypeptide of the TGF-β superfamily and a carrier comprising a vinyl pyrrolidone polymer having a molecular weight of from about 2.5 kD to about 20 kD and a solvent selected from the group consisting of water and aqueous buffer solutions; and administering the growth factor composition to the ischemic tissue.

Claim 24. (Original) The method of claim 23, wherein the ischemic tissue is myocardial tissue.

Claim 25. (Original) The method of claim 24, wherein said step of administering comprises injecting the composition into the myocardial tissue.

Claim 26. (Original) The method of claim 25, wherein the composition is a liquid having a viscosity of less than about 3 cP.

Claim 27. (Original) The method of claim 25, wherein the composition is a liquid having a viscosity of less than about 2.5 cP.

Claim 28. (Original) The method of claim 25, wherein the composition is a liquid having a viscosity of less than about 2 cP.

Claim 29. (Original) The method of claim 25, wherein the composition is a liquid having a viscosity of less than about 1.5 cP.

Claims 30-31. (Canceled)

Claim 32. (Previously Presented) A method for inducing angiogenesis comprising:

providing a composition containing a mixture of bone-derived growth factors and a carrier comprising a vinyl pyrrolidone polymer; and

administering said composition directly to an ischemic site in an individual in need of angiogenesis.

Claim 33. (Previously Presented) The method of claim 32 wherein the amino acid content of said mixture of bone-derived growth factor comprises:

about 20-25 mole% acidic amino acids (Asp(+Asn) and Glu(+Gln)),

about 10-15 mole% hydroxy amino acids (Ser and Thr),

about 35-45 mole% aliphatic amino acids (Ala, Gly, Pro, Met, Val, Ile and Leu),

about 4-10 mole% aromatic amino acids (Tyr and Phe), and

about 10-20 mole% basic amino acids (His, Arg and Lys).

Claim 34. (Previously Presented) The method of claim 32 wherein the amino acid content of said mixture of bone-derived growth factor comprises:

about 23.4 mole% acidic amino acids (Asp(+Asn) and Glu(+Gln)),

about 13.5 mole% hydroxy amino acids (Ser and Thr),

about 40.0 mole% aliphatic amino acids (Ala, Gly, Pro, Met, Val, Ile and Leu),

about 6.8 mole% aromatic amino acids (Tyr and Phe), and

about 16.6 mole% basic amino acids (His, Arg and Lys).

Claim 35. (Previously Presented) The method of claim 32 wherein about 60% of the protein content of said bone-derived growth factor mixture is histones, ribosomes and growth factors.

Claim 36. (Previously Presented) The method of claim 32 wherein said composition comprises a synergistic combination of bone-derived growth factors with respect to enhancing proliferation, migration and/or differentiation processes essential to angiogenesis, compared to that obtained with a single bone growth factor.

Claim 37. (Previously Presented) A method for inducing angiogenesis in a patient, said method comprising the step of providing to a patient in need of angiogenesis, the growth factor composition of any one of claims 13 to 15.

Claim 38. (Previously Presented) The method of claim 37, wherein said patient is human.

Claim 39. (Previously Presented) The method of claim 37, wherein said step of providing comprises injecting said growth factor composition into said patient's body.

Claim 40. (Previously Presented) The method of claim 37, wherein said step of providing comprises injecting said growth factor composition into said patient's heart.

Claim 41. (Previously Presented) The method of claim 37, wherein said step of providing comprises administering said growth factor composition to said patient subcutaneously.

Claim 42. (Previously Presented) The method of claim 37, wherein said step of providing comprises administering said growth factor composition to said patient intramuscularly.

Claim 43. (Previously Presented) The method of claim 37, wherein said step of providing comprises administering said growth factor composition to said patient intravenously.

Claim 44. (Previously Presented) A method for treating ischemic tissue, said method comprising the step of providing to a patient in need thereof, the growth factor composition of any one of claims 13 to 15.

Claim 45. (Previously Presented) The method of claim 44, wherein said ischemic tissue is myocardial tissue.

Claim 46. (Previously Presented) The method of claim 44, wherein said step of providing comprises injecting said growth factor composition into said ischemic tissue.

Claim 47. (Previously Presented) The method of claim 44, wherein said growth factor composition is a liquid having a viscosity of less than about 3 cP.

Claim 48. (Previously Presented) A method of promoting soft tissue regeneration in a living subject, said method comprising the step of providing to a patient in need thereof, the growth factor composition of any one of claims 13 to 15.

Claim 49. (Previously Presented) A method for increasing the bioavailability of a growth factor at a site where soft tissue regeneration in a living subject is desired, said method comprising the step of: providing to a site where soft tissue regeneration in a patient in need thereof is desired, the growth factor composition of any one of claims 13 to 15.